

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-7 (Cancelled)

Claim 8 (Currently amended): A ~~vaccine comprising a vaccine vector wherein the vaccine vector comprises~~ comprising a nucleic acid molecule which encodes a ~~polypeptide selected from any one of:~~

(a) — SEQ ID No: 2;

(b) — an immunogenic fragment comprising at least 12 consecutive amino acids from SEQ ID No: 2; and

(c) — the polypeptide of (a) or (b) which has been modified by conservative amino acid substitution without loss of immunogenicity, wherein said modified polypeptide is at least 75% identical in amino acid sequence to the corresponding polypeptide of (a) or (b);

wherein the nucleic acid molecule is ~~either~~ operatively linked to ~~one or more control sequences~~ ^{substantially} a promoter for expression of the polypeptide in a mammalian cell, ~~or is integrated and expressed in a bacterial cell suitable for use as a vaccine vector.~~

Claim 9 ^N (Withdrawn and Currently amended): The vaccine of claim 38 wherein the ~~second nucleic acid encodes an~~ additional polypeptide is a *Chlamydia* polypeptide.

Claim 10 (Currently amended): A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent suitable for use in a vaccine and a nucleic acid molecule comprising a nucleic acid sequence which encodes a ~~polypeptide selected from any one of:~~

(a) — SEQ ID No: 2;

(b) — an immunogenic fragment comprising at least 12 consecutive amino acids from SEQ ID No: 2; and

~~(c) — the polypeptide of (a) or (b) which has been modified by conservative amino acid substitution without loss of immunogenicity, wherein said modified polypeptide is at least 75% identical in amino acid sequence to the polypeptide of (a) or (b); wherein the nucleic acid molecule is operatively linked to one or more control sequences~~ ^{enh} a promoter for expression of the polypeptide in a mammalian cell.

Claim 11 (Currently amended): A vaccine comprising the vaccine vector according to ~~of claim 8 further comprising~~ and a pharmaceutically acceptable carrier.

Claims 12-34 (Cancelled)

Claim 35 (Withdrawn): Expression plasmid pCAmg002.

Claim 36 (Withdrawn): A nucleic acid molecule of SEQ ID NO. 3 or 4.

Claims 37 (Cancelled)

Claim 38 ^N (Currently amended): The vaccine vector of claim 8 further comprising a second nucleic acid encoding an additional polypeptide which enhances the immune response to the polypeptide ~~selected from any one of:~~

(a) — having SEQ ID No: 2[[:]]

(b) — ~~an immunogenic fragment comprising at least 12 consecutive amino acids from SEQ ID No: 2; and~~

(c) — ~~the polypeptide of (a) or (b) which has been modified by conservative amino acid substitution without loss of immunogenicity, wherein said modified polypeptide is at least 75% identical in amino acid sequence to the corresponding polypeptide of (a) or (b).~~

Claims 39-41 (Cancelled)

Claim 42 (New): The vaccine vector of claim 8 wherein the promoter is cytomegalovirus promoter (CMV).

Claim 43 (New): The composition of claim 10 wherein the promoter is cytomegalovirus promoter (CMV).

Claim 44 (New): The vaccine of claim 11 wherein the promoter is cytomegalovirus promoter (CMV).

Claim 45 (New): The vaccine vector of claim 38 wherein the promoter is cytomegalovirus promoter (CMV).